

NATURAL AREAS NEWSLETTER



Issue Number 3

July, 1988

NATURAL AREAS HIT HARD BY FIRES

Wild fires have historically been a significant and natural component of ecosystems. Although management of Natural Areas stresses a "nature takes its course" management philosophy, there are situations when human intervention is necessary. This is particularly the case with wild fires that threaten private property or human life. This year because of the extremely dry conditions Natural Areas are extremely vulnerable to fires. A match or a cigarette carelessly dropped, heat from the hot muffler of a car, a campfire built too close to the bushes or not properly extinguished, can flare up in seconds and cause considerable damage.

There were four times as many forest fires in Alberta by mid-April, as compared to the same period last year, with the blazes fed by dry brush and trees. Four natural areas have been affected by the recent rash of fires: Astotin, Bilby, Sherwood Park and White Earth Valley. It is believed that these four fires were all caused by human activity and therefore were preventable.

An area east of Fort Saskatchewan, which includes the Astotin Natural Area, was damaged during the spring by fire. In early April a fire started on adjacent private lands. It was rapidly brought under control after a perimeter fire line was constructed. Subsequently, in early May, another fire started on the same private lands, adjacent and west of the Natural Area. It lasted several weeks and spread onto the Natural Area. Alberta Forest Service assisted the dedicated county fire fighters who put in long days fighting this stubborn and unpredictable fire. This full co-operation was essential and resulted in effectively fighting this fire without any loss of dwellings or life. The fire burned over 50 percent of the Natural Area, some private lands and threatened private property and personal safety. A substantial amount of damage to the Astotin Natural Area was caused both from the fire and from the firefighting efforts.

In the vicinity of White Earth Valley Natural Area, a fire started around 2 p.m. on April 28. Small spot fires

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NATURAL AREAS & DROUGHT

Last winter was the driest winter in Alberta since 1889, with snowfall across the province generally at half its normal level. Precipitation levels last fall were also below normal in nearly half the crop regions. These factors, combined with low spring precipitation, created conditions across most of the province that threatened fish and wildlife resources, agriculture, forestry and natural areas. Even though the recent rain in several parts of the province has improved conditions significantly, it will take much more to return groundwater levels to normal.

As a result of the spring drought, wells and smaller streams began to dry-up. Dry prairie sloughs and reservoirs increased in number and many ponds turned to mudflats. Edmonton area lakes, such as Wabamun, Lac Ste. Anne, and Pigeon Lake were well below their normal levels with possibilities of reaching record lows. Even the marl ponds in Wagner Natural Area, which are fed by springs, temporarily dried up this spring.

Low water levels during dry years result in what is sometimes a temporary loss of important fish and wildlife habitat. Drought conditions can cause a noticeable change in bird species. In particular, waterfowl and other wetland bird populations fall as wetlands shrink and dry up. As an increasing number of their nesting sites disappear, the duck populations can be significantly affected. Ducks become more vulnerable to predators and because they are forced to search for new water sites they may not nest at all. Canada Geese moved farther north this year in search of water as many were unable to nest in the parkland and prairies. Pheasant and sage grouse populations were affected as pheasant eggs dried out in the low humidity and little wetland vegetation was available for sage grouse chicks. Even whooping cranes are potentially threatened if they are deprived of their regular spring and fall nesting and feeding spots. Shorebirds have had to overfly traditional resting sloughs in the south that have completely dried up. An enormous increase in shorebird numbers was

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STEWARD HAPPENINGS:

Spring Clean-ups

The many people who enjoy natural areas also work diligently to maintain the sites. On May 15, seventeen members from The Alberta Off Highway Vehicle Association completed a cleanup of the Redwater Natural Area. This task involved the removal of six truck loads of garbage from this large site northeast of Edmonton.

The Wagner Natural Area Society has also this spring put in about 120 person hours in a cleanup of its area. They were assisted by 31 guides and leaders from the 1st, 2nd and 6th Spruce Grove Girl Guides. The Natural Areas Program greatly appreciates the time and effort that volunteers have spent in cleaning up their sites. Thanks for a job well done!

The Legal Side

The volunteer stewards for the Riverlot #56 Natural Area, located 2 km north of St. Albert, were very concerned with the legal implications of public use and the question of public liability on the natural area. As the Riverlot 56 Natural Area Society felt that these topics would be of interest to similar groups in the Edmonton area, an information meeting was organized and an invitation extended to the Wagner Natural Area Society and the Sherwood Park Naturalists. Donna Tingley, of the Environmental Law Centre, graciously consented to provide information and discuss such issues as liability, risk management and taxation. The meeting was held on Monday, May 16 at Robert Rundle School in St. Albert with 12 people in attendance.

Alice Hendry, a member of the Wagner Natural Area Society, stated that the meeting was a valuable way to address the many liability issues which the various societies face. The need for this type of consultation was obvious. The general consensus of the meeting was that if a group takes the proper precautions to provide a safe environment for people, the onus is usually placed on the user to prove negligence. It was stressed several times throughout the meeting that liability is a fact of life and that any activity that a person does or is responsible for is theoretically open to civil suits. However one must have faith in the courts to determine what 'reasonable precautions' are in assessing the merits of any case.

The Environmental Law Centre has published an excellent review of issues related to protecting land. Copies of this booklet, 'The Conservation Kit - A Legal Guide to Private Conservancy' can be obtained for \$15 from the address below. If you wish to obtain information on other environmental law issues, please write to:

The Environmental Law Centre
202, 10110 - 124 Street
Edmonton, Alberta T5N 1P6



Western or Boreal Toad
Original Artwork by Terry Thormin.

Toad Stroll

The Wagner Natural Area Society, on Wednesday, May 11 held their annual Frog and Toad Walk. Wayne Roberts, a University of Alberta professor, lead 11 amphibian seekers around the marl pond trail where wood frogs and boreal toads were heard croaking through the evening. As dusk approached the male frogs not only became quite vocal, but pursued one another with unrivaled excitement, hoping to find a female. Though there were numerous toads seen in the ponds at the time, the excited males were unaware that it was girl's night out and began hopping on one another's backs, only to be vocally croaked out of the uncomfortable position by the male counterpart. But better times were ahead! On the way back to the vehicles at 10:00 p.m. numerous female toads were seen advancing along the trail towards the pond.

Signs! Signs!

Just in case you are wondering . . . several Natural Area signs are in the process of being put up at sites throughout the province. Wildcat Island located 9km west of Cochrane, Outpost Wetlands located just south of Cardston and North Cooking Lake located 17 km east of Sherwood Park on the Wye road are just a few of the sites which will have new signs erected in the early part of June. These signs are attractive sand-carved cedar designation signs varying in size from three feet by three feet to as large as four feet by six feet. Other sites that signs will be placed on this summer include Kleskun Hills, Halfmoon Lake, Innisfail, Pine Sands and Bilby. Look for them the next time you visit these sites.

The Volks Go Marching Along

Clarence Truckey, the volunteer steward for the Spruce Island Lake Natural Area, located 40 km north of Westlock, is organizing a Volksmarch for August 6 and 7, 1988. The Volksmarch will provide an opportunity for hikers to explore the many trails located throughout the Natural Area. This activity has been organized in conjunction with many other groups; The Westlock Chamber of Commerce has agreed to provide a barbecue, a local camp organization and The Westlock Hire-A-Student branch will provide refreshments for the participants.

And in Closing.....

We realize that other volunteer stewards have been organizing activities for their natural area. If you have had, or are organizing an activity for your site please drop us a line so we can keep everyone posted.

BIRDS! BIRDS! BIRDS!

For those who love birds in their backyards:

So here we are - it's August and fall migration has already started. The breeding male hummingbirds have migrated weeks ago leaving more nectar available for their families. If you have a hummingbird feeder still going now, please make plans to wean the birds from it immediately. As the young hummers may know only this food source it is wise to put the feeder up each morning and evening for one hour for a week before finally removing it. Hummingbirds will stick around an artificial feeder until it is too late for them to migrate and find food on the way south. The hummingbird population suffers significant losses every fall in this way. Another significant source of death is the red food coloring put in sugar water. Food coloring is a mild poison that once ingested remains in the system. It accumulates so quickly in hummers (they take over their body weight in nectar every day) that they die from it. Putting or making an artificial red flower near the end of the feeder works as well or better to attract them. Sugar water is also very quickly contaminated with organisms that can kill the hummer, so it should be changed every week.

The small perching bird migration is underway. So if you want to set up a winter feeder the best time is now, before they all leave. But if you decided to attract birds in this way it is extremely important to keep enough food in your feeder every day until food is available to the birds next spring. It takes only a day for a small bird to starve to death and if your feeder is out in the country where other feeders are not available, your birds will starve without it.

The food you put out depends upon which birds you want to attract. Waxwings and Pine Grosbeaks love berries while Black-capped Chickadees, Evening Grosbeaks, House Sparrows, Purple Finches, Blue Jays, and others enjoy sunflower seeds. The use of the local small sunflower seeds (the type used for pressing into oil are difficult for House Sparrow to open and this will keep only native birds at your feeder. If the bird seed has larger seeds and sunflower seeds in it, the birds tend to scrape out the smaller seed and toss it over the side.

Blue Jays are annoying to some because they store food and drive the smaller birds away when they come. A good solution to this problem is to give them a daily ration of unsalted unshelled peanuts in a different location. Once they discover this they won't bother with sunflower seeds anymore. A good way to feed them if you have a windowsill is to take off the screen for the winter and put the peanuts on the sill. If you have patience, it won't be long until some will take the nuts from your hand. You'll find that each has his or her own personality and that they all like coming at a certain time every morning and afternoon and appreciate your promptness. In fact, if you sleep in or are in another room, they can find you and tap on your window and scream at you to let you know you're late and they're hungry.

Fat and/or peanut butter attracts woodpeckers, nuthatches and chickadees. The fat can be wired to a tree trunk and peanut butter can also be scraped on the wire. Alternatively an onion net bag can be hung from a

branch or pole with fat in it. I've also seen a small shallow barbecue set up with fat in it up to the grill that was very popular with the woodpeckers. The prime thing to remember for all feeders is that only "uncontaminated" food is good enough for your birds. Avoid salt, preservatives, food-coloring etc. and enjoy your birds this winter.

For those of you who keep nest boxes at home or at your favorite natural area, be encouraged to keep up the good work. The Mountain Bluebird numbers dropped dramatically in Alberta earlier this century due to European Starlings taking over their nesting cavities. The Mountain Bluebird is back on the map due to the interest of people like you. However, this work needs to be kept up.

Fall is the perfect time to clean out nest boxes because the weather is generally warmer and the ground drier than in the early spring. Simply dump out the old nesting material and give the inside of the box a quick swish with a rag and bleach solution. It is important to disinfect in this manner because parasites can survive over winter in the insulating nest material. For boxes that are more difficult to get at such as duck and Kestrel nest boxes (did you know that ducks such as Bufflehead and Goldeneye are cavity nesters?), this is not usually done.

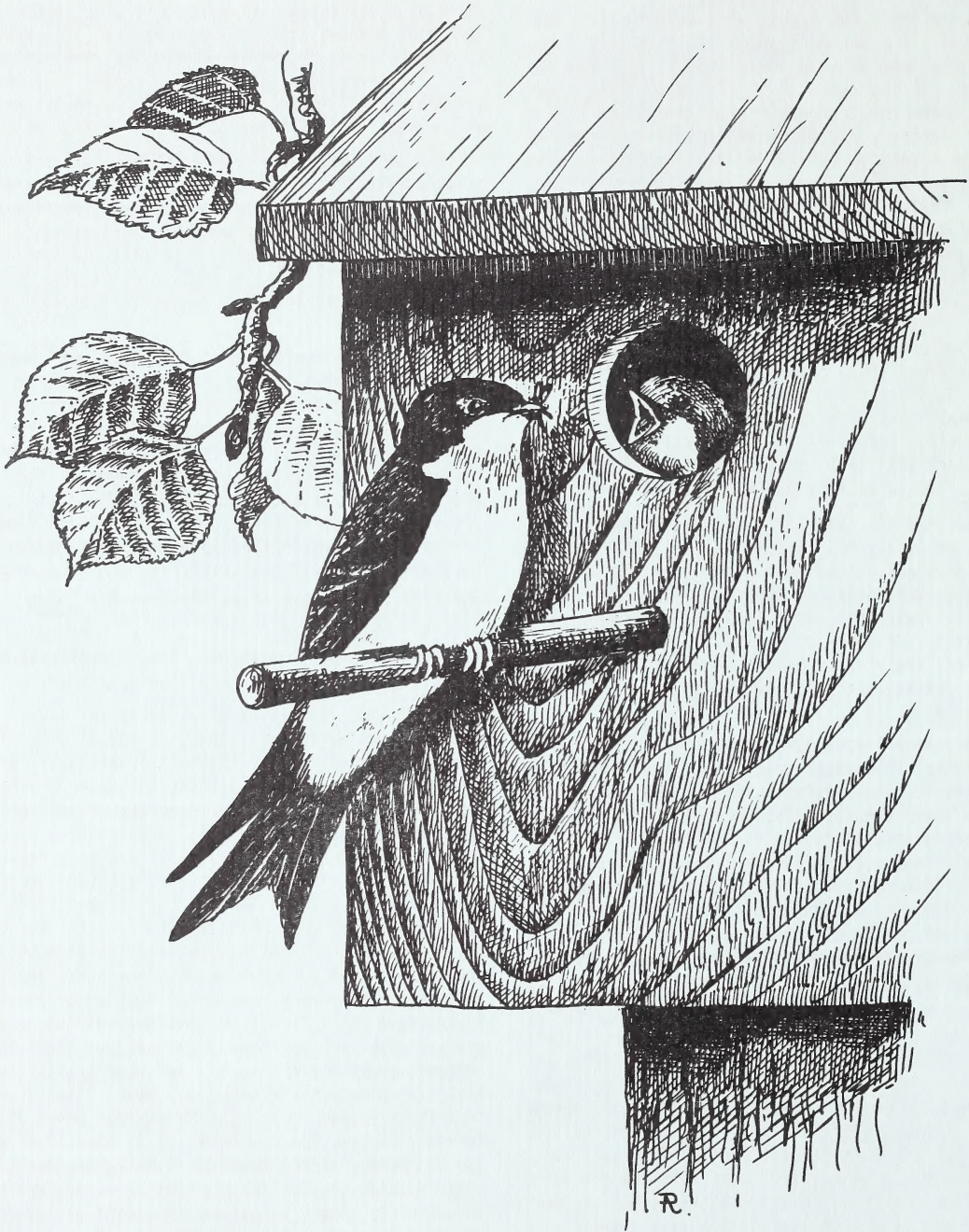
And for those who love looking for birds:

The following is a very general "when and where" guide for migratory birds this fall. You'll find that they come through in "waves" of different species.

The adult shorebirds and the small perching birds actually start migrating in the last half of July. Look for shorebirds (such as sandpipers) on lake and river banks and mudflats. On the prairies, the best places to see perching birds (such as vireos and warblers) are the treed or bushy ravines. While most waterfowl and hawks migrate in September-October, White-fronted Geese come through Alberta from the northern forests and tundra in late August in large numbers. The Rough-legged Hawk and Tundra Swan (formerly the Whistling Swan) arrive from the tundra in October-November, as do many of the immature shorebirds. Most hawks migrate by following north-south ridges where they can catch updrafts. In the prairies they follow north-south valleys and canyons instead, which give them the same effect plus food and shelter. An exception to this is the Bald Eagle which migrates very late. The best time to see Bald Eagles is in late November when the ice is forming on the lakes. When all is iced over except a small opening over the deep potholes in the lakes you will find Bald Eagles sitting on the ice, perched beside it or soaring over it. Here the late or sick ducks congregate and supply the eagles with meals "at their own expense". The eagles fly over the open potholes and grab any ducks that are no longer able to fly away.

It is true that most birds migrate south of Alberta, but for some, such as the Bohemian Waxwings, some Snowy Owls, Gyrfalcons, Rough-legged Hawks, Northern Shrikes, and Northern Goshawks, Alberta is their southern wintering range.

Chel MacDonald - Natural Areas Program



Tree Swallows at Nest Box

STEWARD PROFILE: Clarence Truckey

Although the Volunteer Steward Program has only been in operation for eight months, in some cases people have been acting as stewards for years. This is the story of one of them.

A retired school teacher, Clarence Truckey lives in the Town of Westlock, just forty km south of The Spruce Island Lake Candidate Natural Area. He has been interested in this site throughout his twenty year teaching career. His role as "Coordinator of Outdoor Education" for The Westlock School Division, allowed him to promote many programs centered at Camp Mackinicholea which is located near Spruce Island Lake.

As students desired more outdoor experiences, Clarence began using the area around Spruce Island Lake for hiking trips, cross country skiing and nature observation. Weekend campouts were soon initiated for junior high school students and for hunter training classes.

It was through these school experiences that Clarence realized the enormous potential that this area had for educational and recreational activities. His enthusiasm played an important role in the placing of a natural areas reservation on this site in 1976.

In 1979, as president, he encouraged the Long Island Lake Camp Society to obtain a License Of Occupation for trail use and development. They worked closely with the Tawatinaw Valley Cross Country Ski Club to develop a trail system. The construction of trails assisted in controlling recreational activities, thus affording the site better protection.

Although the site was placed under a reservation in 1976 it was not until this year that the Spruce Island Lake management plan was initiated and a recommendation made to officially establish this site as a Natural Area. Clarence has been working with Natural Area Program staff members in preparing this plan.

"I believe that the Natural Areas Program is important and that the volunteer stewards perform a valuable function. I would like to see a higher profile for the Volunteer Steward Program and an annual meeting organized at which stewards could exchange ideas and information. A network of stewards is very important and the newsletter performs a crucial role in this regard" said Clarence.

It appears promising that this site will obtain an Order-In-Council status. The Natural Areas Staff would like to thank Clarence for his continuing interest and support throughout the years.

GEYER'S WILD ONION

There are five different types of wild onions that grow in Alberta. Most of these are fairly common, but one, the Geyer's Wild Onion (*Allium geyeri*) is very rare, and probably endangered in Alberta.

Geyer's Wild Onion has narrow, channelled leaves and grows from 2 to 5 cm tall. The flowering head is erect, distinguishing it from the nodding onion. The flowers are usually pink, sometimes white. Often in place of flowers there are small pointed bulbs. This is its most characteristic feature.

This onion is only known from 4 locations in southwestern Alberta all of which are in the Foothills Grassland Natural Region. Because it requires undisturbed wet meadows and streambank habitats it has probably always been relatively rare. But as many of these habitats have been altered by drainage and cultivation or heavy grazing it is probably now endangered.

If you know of any sites where Geyer's Wild Onion grows, or come across any sites during your trips please let us know. And remember, if you do find this plant leave it undisturbed so that this species can survive and will be available for others to enjoy.



Original artwork by John Maywood

(cont. from page 1) Natural Areas Hit Hard By Fires



were quickly noticed and the County of Thorhild was notified. The fire raged for several days resulting in approximately 200 acres burned within the natural area. Lac La Biche Forest Service was called in to act in an advisory capacity to aid the county. Natural Areas volunteer steward Shannon Trost provided the Natural Areas Program with frequent updates of the status of the fire.

On April 13, in the County of Lac Ste. Anne, near Onoway, the Bilby Natural Area was also affected by a fire. Due to the quick action of Vic Haveans (a member of the Onoway District Fish and Game Association and Gun Club), two county employees and later some members of the Onoway Volunteer Fire Department, the fire was brought under control. Approximately eight acres were burned.

A small duff fire, occurring in late February, consumed approximately 15 square meters of the Sherwood Park Natural Area. The fire, which most likely started from a campfire that was not fully extinguished, may have been burning for up to two weeks before it was detected. The Sherwood Park Fire Department extinguished the fire and damages were minimal.

The policy of Alberta Forestry, Lands & Wildlife has always been to suppress fires, to protect adjacent private properties, and to ensure personal safety. The

Department would like to thank all those who cooperated and worked hard to fight these fires.

(cont. from p. 1) Natural Areas & Drought

noticed on Kimiwan Lake Candidate Natural Area. This is one of the few suitable lakes remaining with sufficient water to attract shorebirds.

Other creatures, such as antelope and prairie mule deer can also be affected by drought that shrinks wildlife habitat and consequently diminishes food sources. A loss of muskrat and beaver colonies can also result from a prolonged drought.

Unfortunately, with drought, comes fire due to low moisture levels in Alberta's forests. Extensive fires have already occurred on four Natural Areas: Astotin, White Earth Valley, Bilby and Sherwood Park. (see article, this newsletter)

Dry weather conditions are also directly linked to pest infestations. For instance dry, warm weather promotes the breeding and survival of grasshoppers and Pale Western cutworm. This year, so far, the mosquito is virtually non-existent in some areas because the eggs require water for hatching. However, the eggs can survive for years, withstanding repeated freezing and drying, and hatch within a few days when eventually covered by water.

As Natural Areas are, of course, not immune to drought, stewards are encouraged to keep a close eye on their site for any changes that are caused by drought conditions. These changes and observations should be noted on the inspection forms. This will assist in the long-term monitoring of the sites as well as provide information on the effects of drought on wildlife species, communities and natural features. Plant and animal species composition can be drastically altered by drought conditions and any site-specific information that you can provide on this will be valuable for the site records.

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